



REMARKS/ARGUMENTS

Claims 10-40 now stand in the present application, claims 10, 11 and 29 having been amended and claims 1 and 3-9 having been canceled. Reconsideration and favorable action is respectfully requested in view of the above amendments and the following remarks.

Applicants' inventions are directed to a specific configuration of wheelposts and buckets so as to cooperatively fit together so as to reduce the occurrence of peak stresses during operation. Applicants believe that their configuration is a distinct and patentable departure from those in the prior art and that they have described in detail how their configurations of wheelposts and buckets patentably defines over the state of the prior art. It is also respectfully submitted that the specific configurations disclosed and claimed in the present application are not merely choices of engineering design but are specifically created from a literally infinite number of possibilities to reduce operating stresses in the third stage of a turbine and yet at the same time reduce the number of moving parts required to accomplish the smooth operation of the turbine.

In the Office Action, the Examiner has rejected claims 1 and 3-9 over various references. Since these claims have been canceled the Examiner's rejections of the claims are now moot.

The Examiner has also rejected claims 10-13, 21, 25 and 29-30 under 35 U.S.C. § 103 as being unpatentable over United Kingdom Patent 677,142 (hereinafter the '142 patent). Applicants respectfully traverse the Examiner's § 103 rejection of the claims based on the '142 patent.

The '142 patent states on page 2, lines 1-3 that "[t]he included root angle, that is the angle of taper between the inclined sides, is approximately 30 to 40°." Applicants' invention is patentably different from the '142 patent with respect to the angle between the faces of the uppermost tangs as shown, for example, in Figures 10 and 12, respectively, for a bucket and wheelpost. More particularly, the angle defined by 2E is greater than the corresponding angle identified in the '142 patent as ranging from 30 to 40°. Applicants have amended claims 10, 11 and 29 to recite that the angle (defined by 2E) ° is 51.56° (when two tangent lines are drawn along the faces of the uppermost tangs or filets within Figures 10 and 12). In addition, these claims have been further amended to recite that the bottom most tang or filet does not lie along the tangent lines framing the angle (2E). Accordingly, the bucket and wheelpost arrangement of Applicants' invention patentably differs from that of the '142 patent.

Since independent claims 10, 11 and 29 have been amended to more clearly recite the patentable distinction of the angle from tangent lines being drawn along the faces of the uppermost tangs or filets to be 51.56° and since the cited art discloses and claims a range for this angle for no more than 30 to 40°, it is respectfully submitted that Applicants' invention patentably defines over the '142 patent. Moreover, it should be understood that this is not a mere matter of design choice. This is emphasized by the fact that the bottom tang or filet is further recited in the claims to not lie along the same parallel angle along the face of the uppermost tangs or filets in Applicants' invention. Thus, the angle for the lower tang is even greater than 51.56°. Since the claimed angular relationship for the upper most tangs and filets defines a specific, precise angle and the bottom most tang or filet does not lie along the tangent lines that define this

angle there is nothing in the prior art that teaches or suggests this construction.

Moreover, the claimed construction could not have been arrived at merely by employing “routine skill in the art” because there are literally an infinite number of possible specific angles defined by the uppermost tangs or filets let alone further requiring that the bottom most tang or filet not lie along the tangent lines forming the recited specific angle. The case law cited by the Examiner is inapposite here, since the amended claims now recite specific structure and not broad ranges.

Accordingly, independent claims 10, 11 and 29, and their respective dependent claims, are believed to patentably define over the ‘142 patent.

The Examiner has also rejected claims 10-17, 21-25 and 29-32 under 35 U.S.C. § 103 as being unpatentable over Goodwin. Applicants respectfully traverse the Examiner’s § 103 rejection of the claims in view of Goodwin.

Goodwin suffers the same deficiency as does the ‘142 patent. More particularly, as clearly stated in the Table at column 3 of the cited reference, the angle between the tangent lines along the opposite faces of the tang varies from 35 to 40°. Accordingly, Applicants’ invention in which this angle is 51.56° and the bottom most tang or filet does not lie along the tangent lines forming the angle, patentably defines over Goodwin for the same reasons given above with respect to the ‘142 patent.

The Examiner has also rejected claims 14-40 under 35 U.S.C. § 103(a) as being unpatentable over various combinations of the ‘142 patent, Johnson, Caruso, and Goodwin. Applicants respectfully traverse the Examiner’s § 103(a) rejections of the claims over the cited art.

None of the cited references taken singly or in any combination teaches or suggests the specific claimed angular relationship between the upper most filets and tangs in Applicants' claimed wheel posts buckets. Accordingly, these claims are believed to patentably define over the cited references taken either singly or in combination for the same reasons given above with respect to independent claims 10, 11 and 29.

Therefore, in view of the above amendment and remarks, it is respectfully requested that the application be reconsidered and that all of claims 10-40, now standing in the application, be allowed and that the case be passed to issue. If there are any other issues remaining which the Examiner believes could be resolved through either a supplemental response or an Examiner's amendment, the Examiner is respectfully requested to contact the undersigned at the local telephone exchange indicated below.

Respectfully submitted,

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